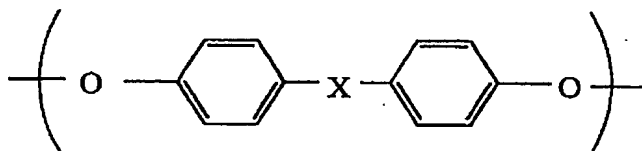


## CLAIMS

1. An aromatic polycarbonate having a viscosity-average molecular weight of 16,000 or higher obtained by the transesterification method, characterized in that the ratio of the weight-average molecular weight (Mw) to number-average molecular weight (Mn) as measured by gel permeation chromatography and calculated for standard polystyrene (Mw/Mn) is in the range of from 2.8 to 4.5 and that the proportion of the number of moles of all branched structural units to 1 mol of structural units represented by general formula (1) is higher than 0.3 mol% and not higher than 0.95 mol%:

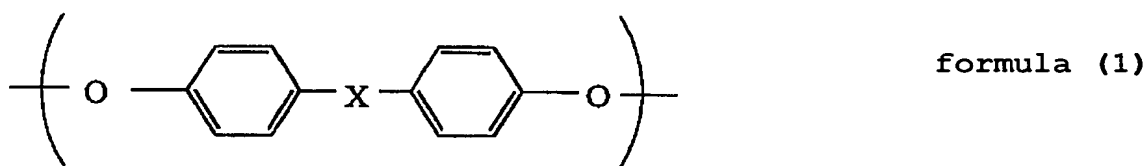


formula (1)

(wherein X is a member selected from the group consisting of a single bond, an alkylene group having 1 to 8 carbon atoms, an alkylidene group having 2 to 8 carbon atoms, a cycloalkylene group having 5 to 15 carbon atoms, a cycloalkylidene group having 5 to 15 carbon atoms, and bivalent groups represented by -O-, -S-, -CO-, -SO-, and -SO<sub>2</sub>-).

2. An aromatic polycarbonate having a viscosity-average molecular weight of 16,000 or higher obtained by the transesterification method, characterized in that the ratio of the viscosity-average molecular weight (Mv) calculated

using the following formula (2) to the number-average molecular weight ( $M_n'$ ) calculated from the number of all molecular ends ( $M_v/M_n'$ ) is in the range of from 1.8 to 3.5 and that the proportion of the number of moles of all branched structural units to 1 mol of structural units represented by general formula (1) is higher than 0.3 mol% and not higher than 0.95 mol%:

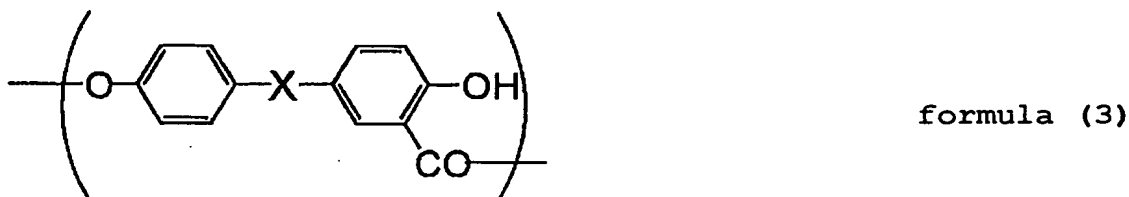


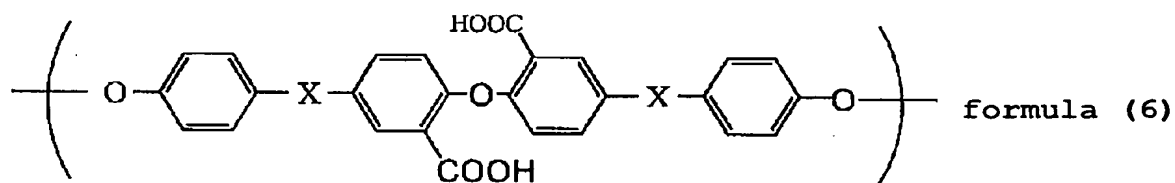
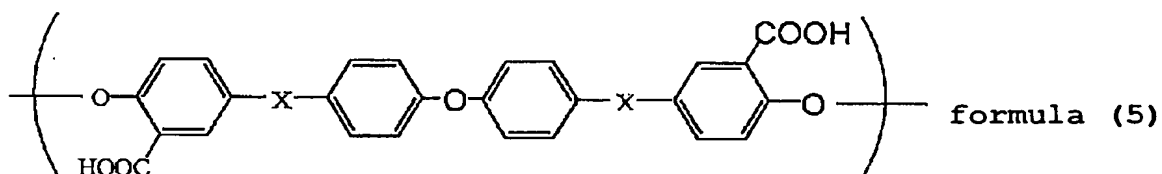
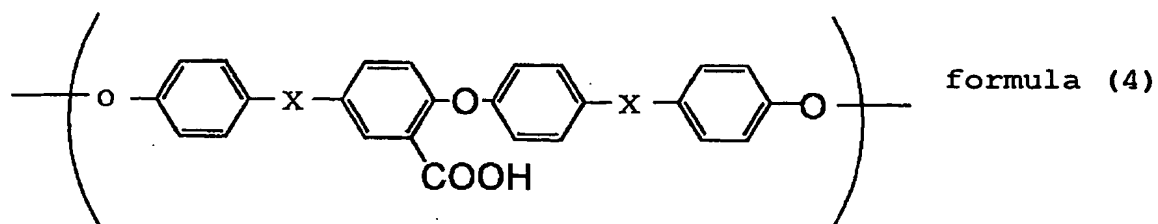
$$\eta_{sp}/C = [\eta] \times (1 + 0.28\eta_{sp}) \quad \text{formula (2)}$$

$$[\eta] = 1.23 \times 10^{-4} \times (M_v)^{0.83}$$

(wherein  $\eta_{sp}$  is the specific viscosity of a methylene chloride solution of the polycarbonate resin as measured at 20°C and C is the concentration of this methylene chloride solution, the methylene chloride solution being one having a polycarbonate resin concentration of 0.6 g/dl).

3. The aromatic polycarbonate as claimed in claim 1 or 2, characterized in that the branched structural units are represented by general formulae (3) to (6):





(wherein X is a member selected from the group consisting of a single bond, an alkylene group having 1 to 8 carbon atoms, an alkylidene group having 2 to 8 carbon atoms, a cycloalkylene group having 5 to 15 carbon atoms, a cycloalkylidene group having 5 to 15 carbon atoms, and bivalent groups represented by -O-, -S-, -CO-, -SO-, and -SO<sub>2</sub>-).

4. The aromatic polycarbonate as claimed in any one of claims 1 to 3, characterized in that the value represented by  $\alpha$  in the following formula (7) is in the range of from 0.03 to 0.3:

$$\alpha = p^2\rho/[1-p^2(1-\rho)] \quad \text{formula (7)}$$

(wherein  $\alpha$  represents the probability that a molecular end is a branched unit; p represents the probability that n

repeating units are yielded; and  $\rho$  represents the number of branched units).

5. The aromatic polycarbonate as claimed in claim 4, characterized in that the value represented by the  $\alpha$  is from 0.05 to 0.2.

6. The aromatic polycarbonate as claimed in claim 4, characterized in that the value represented by the  $\alpha$  is from 0.06 to 0.15.

7. The aromatic polycarbonate as claimed in any one of claims 1 to 6, which is an aromatic polycarbonate having a viscosity-average molecular weight of 24,000 or higher.

8. The aromatic polycarbonate as claimed in any one of claims 1 to 7, which has a flow rate ratio (MVR-R), as represented by the following formula (8) and determined in accordance with JIS K 7210, in the range of from 15 to 45.

$$\text{MVR-R} = \text{MVR}(21.6) / \text{MVR}(2.16) \quad \text{formula (8)}$$

9. The aromatic polycarbonate as claimed in any one of claims 1 to 8, wherein the proportion of the number of moles of the branched structural units represented by general formula (5) to 1 mol of the structural units represented by general formula (1) is from 0.0001 to 0.15 mol%.

10. The aromatic polycarbonate as claimed in any one of claims 1 to 9, wherein the proportion of the number of moles of the branched structural units represented by general formula (6) to 1 mol of the structural units represented by general formula (1) is from 0.0001 to 0.15 mol%.

11. A process for producing the aromatic polycarbonate as claimed in any one of claims 1 to 10 by reacting one or more carbonic diesters with one or more aromatic dihydroxy compounds, characterized in that at least one alkali metal compound and/or at least one alkaline earth metal compound is used in producing the aromatic polycarbonate in an amount of from 1.1 to 6  $\mu\text{mol}$  in terms of metal amount per mole of the aromatic dihydroxy compounds.

12. The process for aromatic-polycarbonate production as claimed in claim 11, characterized in that the alkali metal compound and/or alkaline earth metal compound is used in an amount of from 1.3 to 3.8  $\mu\text{mol}$  in terms of metal amount per mole of the aromatic dihydroxy compounds.

13. The process for aromatic-polycarbonate production as claimed in claim 11 or 12, characterized in that the process is a process for producing a branched aromatic polycarbonate which comprises the step of conducting polymerization in at least two polymerizers, and that the final polymerizer is of the horizontal type and the

reaction temperature in the final polymerizer is in the range of from 280 to 300°C.

14. An aromatic polycarbonate composition which comprises the aromatic polycarbonate as claimed in any one of claims 1 to 10 and a carbonic diester compound, wherein the content of the carbonic diester compound is 200 ppm by weight or lower.

15. An aromatic polycarbonate composition which comprises the aromatic polycarbonate as claimed in any one of claims 1 to 10 and a dye, wherein the dye comprises one or more compounds selected from Phthalocyanine Blue dyes and anthraquinone dyes, the content of the dye being from 0.01 ppm by weight to 100 ppm by weight.

16. A hollow container obtained by the blow molding of the aromatic polycarbonate as claimed in any one of claims 1 to 10.

17. A hollow container obtained by the blow molding of the aromatic polycarbonate composition as claimed in claim 14 or 15.

18. The hollow container as claimed in claim 16 or 17, which is a bottle for a dairy product, a bottle for a refreshing beverage, or a bottle for water.